

Essential Fish Habitat project status report

Reporting date: 10-3-07

Project number: 2006-5 & 2007-2

Title: Habitat effects on growth and condition of northern rock sole

PIs: Hurst, Abookire, Heintz, & Short

Funding year: 2006 & 2007

Funding amount: \$17,652 FY06; \$28,865 FY07

Status: ☐ Complete ☒ Incomplete, on schedule ☐ Incomplete, behind schedule

Planned completion date if incomplete: Sampling scheduled for completion 10-07, analyses subsequent.

Reporting: Have the project results been reported? If yes, where were the results reported? No. But talk presented at Larval Fish Conference.

Results: What is the most important result of the study?

The most important results of the work are that the growth rates at our three focus study sites have maintained their rank order over the 3+ sampling seasons to date. Holiday Beach has consistently supported faster growing age-0 rock sole than Pillar Creek Cove and Shakmanof Beach. However, the amount of variation in growth rates between sites has varied among years. In particular, only fish at the Holiday Beach site appeared able to take advantage of an early warming with rapid growth. While not complete, the analyses to date indicate that the higher growth rates are not due solely to temperature differences between sites, and that higher densities of fish at Holiday Beach suggest that differences in prey resources are not the answer. A new hypothesis being investigated in the laboratory and at the field sites is that variation in predator presence exerts a direct influence on the growth of juvenile flatfish, as they rely on crypsis and inactivity for survival.